

CLAIMS

What is claimed is:

- 1 1. A foam swab applicator for use in dispensing fluid from a fluid-containing
2 ampule, comprising:
3 an applicator sleeve having a closed base end and an open fluid delivery end;
4 a hermetically sealed, fluid-containing ampule disposed in said applicator sleeve
5 between said base end and said fluid delivery end ; and
6 a foam swab delivery tip unit mounted on with said applicator sleeve in
7 contacting relationship therewith, said delivery tip unit including:
8 a delivery tip base member received at said fluid delivery end of said applicator
9 sleeve; and
10 a foam swab element mounted to said delivery tip base member so as to extend
11 away from said applicator sleeve.
- 1 2. A foam swab applicator in accordance with claim 1 wherein said foam swab
2 element comprises a polymeric foam material.
- 1 3. A foam swab applicator in accordance with claim 1 wherein said foam swab
2 element comprises an open cell polyurethane foam material.
- 1 4. A foam swab applicator in accordance with claim 1 wherein said foam swab
2 element is generally circular in cross-sectional shape and comprises a planar oblique
3 fluid delivery end face.
- 1 5. A foam swab applicator in accordance with claim 1 wherein said foam swab
2 element is bonded to said delivery tip base member.

1 6. A foam swab applicator in accordance with claim 1 wherein said foam swab
2 element and said delivery tip base member are mounted together by way of a recess on a
3 base end of said foam swab element and an annular swab mounting flange on said
4 delivery tip base member that fits said base end recess.

1 7. A foam swab applicator in accordance with claim 1 wherein said delivery tip
2 base member comprises a fluid metering aperture that is adapted to meter fluid from said
3 applicator sleeve to said foam swab element.

1 8. A foam swab applicator in accordance with claim 1 wherein said delivery tip
2 base member comprises a fluid reservoir that is adapted to receive fluid from said
3 applicator sleeve and maintain said fluid in contact with a base end of said foam swab
4 element.

1 9. A foam swab applicator in accordance with claim 1 wherein said delivery tip
2 base member comprises a fluid collection barrel that is adapted to be slidably received in
3 said fluid delivery end of said applicator sleeve and to collect fluid from said applicator
4 sleeve.

1 10. A foam swab applicator in accordance with claim 9 wherein said fluid collection
2 barrel comprises a tapered tip to facilitate slideable insertion of said fluid delivery tip
3 into said fluid delivery end of said applicator sleeve.

1 11. A foam swab delivery tip unit for use in combination with an applicator assembly
2 adapted to dispense fluid, the applicator assembly including an applicator sleeve having
3 a closed base end and an open fluid delivery end, and a hermetically sealed, fluid-
4 containing ampule disposed in the applicator sleeve between the base end and the fluid
5 delivery end, said foam swab delivery tip unit comprising:

6 a delivery tip base member adapted to be received at and mounted in contacting
7 relationship with the fluid delivery end of the applicator sleeve; and
8 a foam swab element mounted to said delivery tip base member so as to extend
9 away from the applicator sleeve.

1 12. A foam swab delivery tip unit in accordance with claim 11 wherein said foam
2 swab element comprises a polymeric foam material.

1 13. A foam swab delivery tip unit in accordance with claim 11 wherein said foam
2 swab element comprises an open cell polyurethane foam material.

1 14. A foam swab delivery tip unit in accordance with claim 11 wherein said foam
2 swab element is generally circular in cross-sectional shape and comprises a planar
3 oblique fluid delivery end face.

1 15. A foam swab delivery tip unit in accordance with claim 11 wherein said foam
2 swab element is bonded to said delivery tip base member.

1 16. A foam swab delivery tip unit in accordance with claim 11 wherein said foam
2 swab element and said delivery tip base member are mounted together by way of a
3 recess on a base end of said foam swab element and an annular swab mounting flange on
4 said delivery tip base member that fits said base end recess.

1 17. A foam swab delivery tip unit in accordance with claim 11 wherein said delivery
2 tip base member comprises a fluid metering aperture that is adapted to meter fluid from
3 the applicator sleeve to said foam swab element.

1 18. A foam swab delivery tip unit in accordance with claim 11 wherein said delivery
2 tip base member comprises a fluid reservoir that is adapted to receive fluid from the

3 applicator sleeve and maintain said fluid in contact with a base end of said foam swab
4 element.

1 19. A foam swab delivery tip unit in accordance with claim 11 wherein said delivery
2 tip base member comprises a fluid collection barrel that is adapted to be slidably
3 received in the fluid delivery end of the applicator sleeve and to collect fluid from the
4 applicator sleeve.

1 20. A foam swab delivery tip in accordance with claim 19 wherein said fluid
2 collection barrel comprises a tapered tip to facilitate slideable insertion of said fluid
3 delivery tip into the fluid delivery end of the applicator sleeve.

1 21. A foam swab applicator for use in dispensing fluid from a fluid-containing
2 ampule, comprising:
3 an applicator sleeve having a closed base end and an open fluid delivery end;
4 a hermetically sealed, fluid-containing ampule disposed in said applicator sleeve
5 between said base end and said fluid delivery end ; and
6 a foam swab delivery tip unit mounted on and in contacting relationship with said
7 applicator sleeve, said delivery tip unit including:
8 a delivery tip base member received at said fluid delivery end of said applicator
9 sleeve; and
10 a foam swab element mounted to said delivery tip base member so as to extend
11 away from said applicator sleeve;
12 said swab element comprising an open cell polyurethane foam material and being
13 generally circular in cross-sectional shape and having a planar oblique fluid delivery end
14 face;
15 said swab element being bonded to said delivery tip base member by way of a
16 recess on a base end of said foam swab element and an annular swab mounting flange on
17 said delivery tip base member that fits said base end recess;

18 said delivery tip base member including a fluid metering aperture that is adapted
19 to meter fluid from said applicator sleeve to said foam swab element;
20 said delivery tip base member further including a fluid reservoir that is adapted to
21 receive fluid from said applicator sleeve and maintain said fluid in contact with a base
22 end of said foam swab element; and
23 said delivery tip base member further including a fluid collection barrel that is
24 adapted to be slidably received in said fluid delivery end of said applicator sleeve and to
25 collect fluid from said applicator sleeve, said fluid collection barrel having a tapered tip
26 to facilitate slideable insertion of said fluid delivery tip into said fluid delivery end of
27 said applicator sleeve.